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NAS WHITING FIELD
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FINAL PROPOSED PLAN FOR SITE 2 NAS WHITING FIELD FL
8/1/2008
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In accordance with the National Contingency Plan (NCP) Section 300.430(f) and Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's preferred final remedy alternative for OU 2 - Site 2 (Northwest Open Disposal Area) at NAS Whiting Field.



Comments

The Navy will be accepting written comments (see insert) from 15 August through 14 September 2008. The comment period includes an opportunity to request a public meeting at which the Navy would present more detailed site information. A meeting will be held if there is a request from members of the public before the end of the comment period.

All comments will be considered before a final decision about site cleanup is reached.

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PROPOSED PLAN

August 2008

OU 2 - Site 2, Northwest Open Disposal Area

The Department of Defense and the Navy have completed the investigation of surface and subsurface soil at Naval Air Station Whiting Field Operable Unit 2 - Site 2, Northwest Open Disposal Area. The site history and current conditions indicate a response action is not necessary. Unrestricted use and unlimited exposure to surface and subsurface soils is allowed for both residential and nonresidential use.

Introduction

In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.430(f) and Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this Proposed Plan identifies a change in the Preferred Alternative for surface and subsurface soils at Operable Unit (OU) 2 - Site 2, Northwest Open Disposal Area, at Naval Air Station (NAS) Whiting Field (Figure 1).

The Navy, in conjunction with the United States Environmental Protection Agency (USEPA) and Florida Department of Environmental Protection (FDEP), selected Land Use Controls (LUCs) as the remedy for Site 2 in 1999 as documented in the Final Record of Decision (ROD). Based on the recommendations of the first 5-year review in 2004, a No Further Action (NFA) remedy is now being proposed.

Groundwater at Site 2 is being addressed separately as part of the NAS Whiting Field basewide groundwater investigation (Site 40). No surface water exists at Site 2.

This Proposed Plan was developed by the Navy, the lead agency, to fulfill public participation requirements under CERCLA and the NCP. It was finalized with approval from the USEPA, a support agency, and concurrence from the FDEP, a support agency. The Navy and USEPA will select the final remedial action for Site 2 after considering and addressing significant comments from the public.



Figure 1 - Site 2 Location Map

The final response action will be selected to ensure protection of human health and the environment and will be detailed in a ROD Amendment for the site. This Proposed Plan will be published as a permanent part of the Administrative Record for NAS Whiting Field.

This Proposed Plan summarizes information found in greater detail in the *Remedial Investigation (RI) Report, Site 2*; the *Feasibility Study (FS) for Surface and Subsurface Soil, Site 2*; the *Proposed Plan for Surface and Subsurface Soil, Site 2*; the *ROD for Surface and Subsurface Soil, Site 2*; and, other site documents. These materials are available for review at the **NAS Whiting Field Information Repository, West Florida Regional Library, Milton Branch, 805 Alabama Street, Milton, Florida, 32570; (850) 623-5565.**

The public is invited to participate in the remedy selection process by reviewing and commenting on this Proposed Plan. New information or comments received during the public comment period could result in the selection of a remedial action that differs from the proposed remedy.

Site Background

Location: Site 2, Northwest Open Disposal Area, is located along the northwestern boundary of NAS Whiting Field and is approximately 12 acres in size. The approximate location of the disposal area is shown on Figure 1.

Operational and Waste Disposal History: Site 2 includes an old borrow pit used as an open disposal area first used in 1976. Site 2 was used for the disposal of construction and demolition debris during the period from 1976 until 1984. Since 1984, the site has been inactive. Access to the site was unrestricted during its use. Wastes disposed at the site include asphalt, wood, tires, furniture, and similar materials not suitable for landfill disposal. Crushed paint cans and scrap metal parts have been scattered throughout the site. Site 2 has undergone several phases of investigations since 1985.

Investigation Activities

The RI at Site 2 was conducted in phases from 1992 through 1998. Fieldwork included a range of environmental studies to collect the data needed to determine the presence, nature, and extent of contamination in the soil. The field activities included the following:

Soil Gas Survey: Conducted to determine the need for surface and subsurface soil sampling. Soil gas samples were collected from 0 to 1.5 feet below land surface (bls) and various depths below 2 feet bls.

Soil Sampling: Conducted to determine surface and subsurface soil characteristics and contaminant concentrations by laboratory chemical analysis.

The RI Report provided an understanding of soil conditions at Site 2. Groundwater conditions at Site 2 will be investigated and evaluated separately in the basewide groundwater investigation (Site 40).

After the RI Report was completed in 1998, an FS was conducted to identify the best approach to address the soil contamination at the site. Following the FS, and subsequent Proposed Plan, the Final ROD documented the selected remedy as LUCs for surface and subsurface soil at Site 2.

LUCs were selected to provide protection for human health and the environment against the lone constituent of concern (COC), arsenic. However, subsequent soil analysis at NAS Whiting Field indicates the presence of arsenic at elevated concentrations at Site 2 is naturally occurring (FDEP, 2001).

CERCLA Section 104 provides that the Navy and USEPA may take response actions at those sites where a hazardous substance has been released to the environment. Because it has been determined that arsenic present at this site is not a result of a CERCLA release, this Proposed Plan and the subsequent ROD Amendment are being prepared to document the change from the LUC remedy to a NFA decision.

Site Characteristics

Current Conditions: Site 2 is currently a surface depression covered with dense, low-lying vegetation. The bottom elevation is approximately 20 feet below the surrounding land surface, at its lowest point. All surface drainage at the site is internal because of the steep side slopes of the borrow pit. Surface drainage within the borrow pit is down the partially vegetated side slopes to low areas near the middle of the pit where infiltration into the soil occurs. Access to the site is by a gate, located in the southwest corner of the site, from perimeter road. The perimeter of the site is currently forested with planted pine trees approximately 25 to 40 feet in height.

The findings of environmental conditions at the site are summarized below:

General Site Conditions: Surface and subsurface soil at Site 2 consists mainly of sand and silt. The soil at Site 2 is classified as Troup Loamy Sand and Lakeland Sand.

Soil Conditions: Constituents detected in surface soils at Site 2 during the RI included one volatile organic compound (VOC), three semi-volatile organic compounds (SVOCs), and 20 inorganics or metals.

As discussed above, only arsenic was detected at concentrations exceeding FDEP Soil Cleanup Target Levels (SCTLs) (FDEP, 2005) and/or USEPA Region 9 Preliminary Remediation Goals (PRGs) (USEPA, 2002) and was retained as a contaminant of potential concern (COPC) for surface soil at Site 2.

Constituents detected in subsurface soils at Site 2 during the RI included seven VOCs, five SVOCs, 20 inorganics or metals, and cyanide. No constituents were detected in subsurface soils at concentrations exceeding SCTLs or PRGs and, therefore, no COPCs were retained for subsurface soil at Site 2.

Subsequent soil analysis at NAS Whiting Field indicates the presence of arsenic at elevated concentrations at Site 2 is naturally occurring. A review of historical site activities at Site 2 does not support an anthropogenic source for arsenic at the site and subsequently, the arsenic has been determined to be naturally occurring at Site 2.

Scope and Role of OU 2 – Site 2

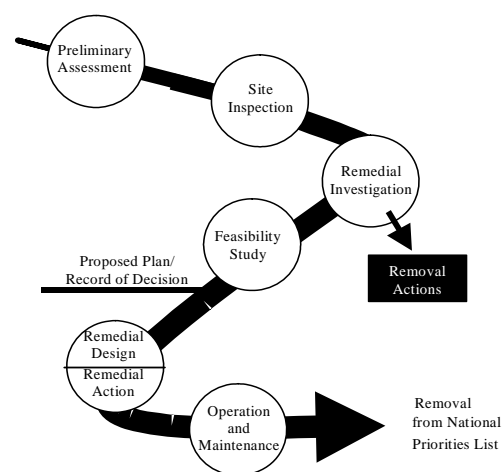
Regulatory Framework

NAS Whiting Field was placed on the USEPA National Priorities List (NPL) for environmental study and cleanup in June 1994 based upon evidence of past historical releases into the environment of CERCLA hazardous substances.

Environmental work at OU 2 - Site 2 is part of the ongoing Navy's Installation Restoration Program that includes 27 OUs at NAS Whiting Field. This is a Department of Defense program to investigate and, if necessary, clean up conditions related to suspected past releases of hazardous materials at military facilities.

Environmental investigation and cleanup work at the facility is being conducted in accordance with the requirements of CERCLA; the Department of Defense Environmental Restoration Program; Executive Order 12580; USEPA issued CERCLA guidance's including, where practicable, the NCP; as well as other federal and state environmental and facility siting laws, regulations, guidance, and policies to the extent required by CERCLA.

The CERCLA process is typically completed in the following stages:



Summary of Site Risks

The data collected during the RI at Site 2 were used in preparing two risk assessments, the human health risk assessment (HHRA) and the ecological risk assessment (ERA), to determine if soil contamination at the site results in risks to human health or the environment.

Following all risk assessment calculations, only one COC, arsenic, was identified in surface soil at concentrations greater than FDEP and USEPA target levels for protection of human health and the environment under a residential land use scenario.

LUCs were based on the detection of arsenic in surface soil samples at concentrations exceeding residential and industrial SCTLs established as guidance criteria by Chapter 62-777, Florida Administrative Code (F.A.C.). Arsenic present at these concentrations could have resulted in a total excess lifetime cancer risk of 2×10^{-5} by a hypothetical future resident, 2×10^{-6} for current and future site trespassers, and 3×10^{-6} by an occupational worker through the ingestion of surface soil. These risk levels exceeded the FDEP target risk level of 1×10^{-6} .

However, as discussed previously, subsequent soil analysis at NAS Whiting Field indicates the presence of arsenic at elevated concentrations at Site 2 is naturally occurring (FDEP, 2001). A review of historical site activities at Site 2 does not support a source for arsenic at the site and subsequently, the arsenic has been dropped as a COC for surface soil at Site 2.

There were no COCs for subsurface soils at Site 2.

Current and Future Land Uses: Currently, Site 2 is used as a borrow pit for the base, and the future anticipated land use at the site remains non-residential.

Ecological Risks: The quantity of the terrestrial habitat at Site 2 is limited. Construction debris was present on the ground surface at the site during the RI. No ecological risks are present in surface or subsurface soil at Site 2.

Conclusion: As discussed above, arsenic has been dropped as a COC for surface soil at Site 2, and there is no longer any human health or ecological risk at the site.

Proposed Remedy

The following proposed remedy has been selected for surface and subsurface soil at Site 2.

The USEPA and FDEP concur with the recommended remedy. However, the Navy, in consultation with the USEPA and FDEP, will not select a final remedy until public comments have been considered.

Site 2 Proposed Plan
(NFA for Surface and
Subsurface Soil)
+
Public Comment



Record
of
Decision
Amendment

The proposed remedy for Site 2 is NFA for surface and subsurface soils. The NFA remedy for Site 2 assumes that no remedial action would occur. No remedial action, treatment, LUCs, or monitoring of conditions would be implemented under the NFA remedy.

Community Participation

Community acceptance of the proposed remedy is the next step. After the Proposed Plan is approved, the ROD Amendment will be signed by the Navy and USEPA with concurrence by FDEP. This document will establish the NFA remedy for surface and subsurface soil at Site 2. No other soil cleanup measures at Site 2 will be proposed.

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 2 and throughout NAS Whiting Field.

The Navy will be accepting written comments on the proposed change in the Site 2 remedy from 15 August to 14 September 2008. Public participation in the selection is encouraged. Comments can be submitted using the enclosed form. Comments will be summarized, and responses will be provided in the Responsiveness Summary section of the ROD Amendment.

The comment period includes an opportunity to request a public meeting at which the Navy would present the RI and FS Reports and Proposed Plan, answer questions, and receive comments in writing from the public. A public meeting will be held if one is requested by members of the public before the end of the comment period.

The NAS Whiting Field Restoration Advisory Board (RAB) is another method used by the Navy to promote public involvement in the base environmental cleanup program. For example, the RAB has been invited to participate in developing the proposed remedy by reviewing associated documents, offering suggestions, and expressing their concerns about the proposed remedial actions. The RAB meets to discuss Installation



Technical Presentation at a RAB meeting



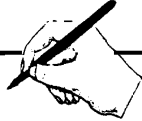
Comments

For your convenience, a public comment form is included with this Proposed Plan. Written comments and requests for more information or a public meeting must be postmarked by 14 September 2008.

Restoration Program status and provide community input into the cleanup process. RAB meetings are open to the public and are advertised in local news media.

A community mailing list is also maintained to distribute updates about the environmental program directly to interested members of the community.

If you need additional information, would like to comment on the proposed remedy, or would like to request a public meeting, please fill out the attached public comment form and mail to the address below or contact:



**Mr. Michael Pattison
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Milton, Florida 32570-6159
(850) 623-7181 (Ext. 18)**

Glossary of Terms

Administrative Record: The complete body of documents pertaining to the investigation and restoration of an environmental site. The body of documents is kept at a location where it can be accessed by the public.

Applicable or Relevant and Appropriate Requirements (ARARs): The federal, state, and local environmental rules, regulations, and criteria that must be met by the selected cleanup action under CERCLA.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A Federal law enacted in 1980 and amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986. CERCLA, administered by the USEPA and commonly known as Superfund, outlines a process to evaluate hazardous waste sites that may pose a threat to human health or the environment.

Constituents of concern (COCs): Chemical constituents detected at levels and/or in a location where it could have an adverse effect on human health and the environment.

Constituents of potential concern (COPCs): Chemicals or constituents detected at levels and/or location that was determined during the RI to possibly have the potential for adverse effects on human health and the environment.

Feasibility Study (FS): An engineering report identifying and evaluating the most appropriate approaches for addressing contamination at a site.

Human health risk assessment (HHRA): An evaluation of the potential for adverse human health effects from exposure to site contaminants.

Information Repository: A public file containing technical reports, reference documents, and other materials relevant to the site cleanup.

National Priorities List (NPL): The USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund.

Proposed Plan: A public participation document detailing the proposed response action at a site.

Preliminary Remediation Goals (PRGs): PRGs establish acceptable exposure levels protective of human health and the environment, based on regulatory requirements, USEPA acceptable risk levels, and assumptions regarding ultimate land uses, as well as contaminant pathways.

Public Comment Period: A legally required opportunity for the community to provide written and oral comments on a proposed environmental action at a hazardous waste site.

Record of Decision (ROD): A public document explaining the selected cleanup alternatives at a site; it is based on information and technical analysis, and on consideration of public comments and concerns. The ROD is issued and signed by the Navy and the USEPA at the completion of a Remedial Investigation and Feasibility Study and after community acceptance of the Proposed Plan.

Remedial Action Objective (RAO): A cleanup objective agreed upon by the Navy and USEPA, in consultation with FDEP. One or more RAOs are typically formulated for each environmental site.

Remedial Investigation (RI): An in-depth study to determine the nature and extent of contamination.

Response action: A federally authorized action to respond to environmental contamination. There are two types: removal action taken over the short-term to respond quickly to a more immediate threat, and remedial action involving long-term activities for a more permanent cleanup solution.

Responsiveness Summary: A section of the ROD summarizing the public comments received during the Proposed Plan public comment period and the responses to those comments.

Restoration Advisory Board (RAB): An advisory group composed of regulatory agency representatives, site personnel, and community volunteers who provide input and promote public involvement in cleanup activities.

Soil Cleanup Target Levels (SCTLs): Target concentration levels established by FDEP (Chapter 62-780, F.A.C.) and determined to be protective of human health and the environment.